

WESTERN GEO-ENGINEERS
 "A SERVICE TO THE OIL AND GAS INDUSTRY"

LITHOLOGY SYMBOLS

REMARKS

WELL ELEV. GL. 1020.63'
 SALINITY IN KB. 1031.5'
 FILTRATE IN PPM 81
 GAS TRAP ACITATOR TYPE
 MUD LIGNOSULFONATE (BAROIL)
 PAUL GRAHAM DLG #1

LEGEND

W WEIGHT
 V VISCOSITY
 F FILTRATE
 FC FILTER CAKE
 SD SAND IN %

S SALINITY
 R RESISTIVITY
 RF FILTRATE RESISTIVITY
 BIT DATA
 NB NEW BIT
 RRB RERUN BIT

CB CORE BIT
 WLCB WIRE LINE CB
 OTHER DATA
 TG TRIP GAS
 CONNECTION GAS
 C CARBIDE

CR CIRCULATE RETURNS
 NR NO RETURN
 DST DRILL STEM TEST
] DST INTERVAL
] CORE INTERVAL

DATE 7/25/60 TO 7/31/60 DEPTH 45' TO 3709' ENGINEERS IRWIN THOMAS

CASING
 7" TO 405'
 TO
 TO

DEPTH	LITHOLOGY	MUD ANALYSIS										CUTTING ANALYSIS	REMARKS		
		TOTAL DITCH GAS					BLENDER							TOTAL GAS	
		PET.	VAP.									PET. VAP.			
0		10	20	30	40	50	75	100	125	150	175	25	50	75	
0		SILTSTN. W. CLAY. BRN. GRAY. FIRM. FRI. W/ MIN. BRN. GRAVELS.												DRILLING SURFACE HOLE W/ 9 7/8" BIT	
100		SILTSTN. BK GRAY GRAY BRN. HD. FIRM. FRI. W/ MIN. BRN. GRAVELS.													
150		CHROMATOGRAPH=100% C1													
200		SILTSTN. SDY. SILTSTN. AS ABOVE.												50	LOST CIRC @ 197 APPROX 45 BBLs
250		SILTSTN. LT. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ POSSIL. FRAGS. MICA.													
300		CHROMATOGRAPH=100% C1													
350		SILTSTN. MD. GRN. GRAY. SOFT. TO FIRM. FRI. W/ FRAGS. OCC. SILTSTN. BONE.													
400		SILTSTN. AND SAND AS ABOVE.													
450		SILTSTN. MD. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ LENTIC FRAGS. TA MICA. GLAUC.													
500		CHROMATOGRAPH=100% C1													
550		SILTSTN. MD. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ LENTIC FRAGS. TA MICA. GLAUC.													
600		CHROMATOGRAPH=100% C1													
650		SILTSTN. MD. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ LENTIC FRAGS. TA MICA. GLAUC.													
700		SILTSTN. MD. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ LENTIC FRAGS. TA MICA. GLAUC.													
750		SILTSTN. AND CLAY AS ABOVE.													
800		CHROMATOGRAPH=100% C1													
850		SILTSTN. MD. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ LENTIC FRAGS. TA MICA. GLAUC.													
900		SILTSTN. MD. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ LENTIC FRAGS. TA MICA. GLAUC.													
950		SILTSTN. MD. GRAY. GRN. FIRM. FRI. W/ MIN. BRN. GRAVELS.													
1000		CHROMATOGRAPH=100% C1													
1050		SILTSTN. AS ABOVE W/ IR. POSSIL. FRAGS.													
1100		CHROMATOGRAPH=100% C1													
1150		SILTSTN. AS ABOVE W/ IR. POSSIL. FRAGS.													
1200		CHROMATOGRAPH=100% C1													
1250		SILTSTN. W/ GRAY. HD. NO. L. POSSIL. FRAGS.													
1300		TO. LI. TAN WELDED TUFF													
1350		SILTSTN. MED. GRAY BRN. FIRM. FRI. W/ MIN. BRN. GRAVELS. SOFT. TO FIRM. FRI. W/ POSSIL. FRAGS.													
1400		CHROMATOGRAPH=100% C1													
1450		SILTSTN. MED. GRAY BRN. FIRM. FRI. W/ MIN. BRN. GRAVELS. SOFT. TO FIRM. FRI. W/ POSSIL. FRAGS.													
1500		SILTSTN. MED. GRAY BRN. FIRM. FRI. W/ MIN. BRN. GRAVELS. SOFT. TO FIRM. FRI. W/ POSSIL. FRAGS.													
1550		SILTSTN. MED. GRAY BRN. FIRM. FRI. W/ MIN. BRN. GRAVELS. SOFT. TO FIRM. FRI. W/ POSSIL. FRAGS.													
1600		SILTSTN. AS ABOVE W/ MIN. BRN. GRAVELS. TAN CLAY.													
1650		CHROMATOGRAPH=100% C1													
1700		V. HD. CALCITE BEIN. L. HD. DRBLU. GRN. BRN. SOFT. TO FIRM. FRI. W/ MIN. BRN. GRAVELS. TAN CLAY.													
1750		SILTSTN. AS ABOVE W/ MIN. BRN. GRAVELS. TAN CLAY.													
1800		SILTSTN. MED. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ LENTIC FRAGS. TA MICA. GLAUC.													
1850		SILTSTN. AS ABOVE W/ SHINY. OCC. HD. TAN W/ FR. STAINERS.													
1900		SILTSTN. AS ABOVE W/ SHINY. OCC. HD. TAN W/ FR. STAINERS.													
1950		SILTSTN. GRAY BRN. FIRM. FRI. W/ MIN. BRN. GRAVELS. SOFT. TO FIRM. FRI. W/ POSSIL. FRAGS.													
2000		CG=40U CHROMATOGRAPH=100% C1 CG=20U CG=22L													
2050		CLAY. LI. TO MD. GRAY. SOFT. TO FIRM. FRI. W/ MIN. BRN. GRAVELS. TAN CLAY.													
2100		CHROMATOGRAPH=100% C1													
2150		CLAY. SILTSTN. AND SH. AS ABOVE.													
2200		CHROMATOGRAPH=100% C1													
2250		LI. GRAY. SOFT. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ MIN. BRN. GRAVELS. TAN CLAY.													
2300		CHROMATOGRAPH=100% C1													
2350		CLAY AND SILTSTN. AS ABOVE.													
2400		CHROMATOGRAPH=100% C1													
2450		CLAY. MED. GRAY BRN. V. SOFT. TO FIRM. FRI. W/ MIN. BRN. GRAVELS. TAN CLAY.													
2500		TG=45U CLAY. LI. TO MED. GRAY BRN. V. SOFT. TO FIRM. FRI. W/ MIN. BRN. GRAVELS. TAN CLAY.												NOTE: ADJUSTED GAS TRAP.	
2550		CG=11U CHROMATOGRAPH=100% C1 CG=21U													
2600		LI. TO MED. GRAY BRN. SOFT. TO FIRM. FRI. W/ MIN. BRN. GRAVELS. TAN CLAY.													
2650		TG=16U VERY HARD TAN WELDED TUFF W/ SILTSTN. CONTAINING FRON. PHOLE. SLOUGH.													
2700		CHROMATOGRAPH=100% C1													
2750		CLAY. V. SOFT. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ MIN. BRN. GRAVELS. TAN CLAY.													
2800		CHROMATOGRAPH=100% C1													
2850		CLAY & SILTSTN. AS ABOVE. W/ OCC. TAN WELDED TUFF.													
2900		CG=17U SILTSTN. GRAY BRN. FIRM. FRI. W/ LI. GRAY BRN. CLAY AS ABOVE. TR. CR. WH. CALCITE, LI. G.													
2950		WAG=23U SILTSTN. BK GRAY BRN. BK GRAY SOFT. TO FIRM. FRI. W/ CLAY. TA.													
3000		CG=10U SILTSTN. MD. GRAY BRN. SOFT. TO FIRM. FRI. W/ LENTIC FRAGS. TA MICA. GLAUC.													
3050		CHROMATOGRAPH=100% C1 CG=13U													
3100		SILTSTN. AND CLAY AS ABOVE.													
3150		CG=14U VERY HARD TAN WELDED TUFF W/ SILTSTN. CONTAINING FRON. PHOLE. SLOUGH.													
3200		CG=10U CLAY. TO GRAY BRN. SILTSTN. SOFT. TO FIRM. FRI. W/ MIN. BRN. GRAVELS. TAN CLAY.													
3250		CHROMATOGRAPH=100% C1													
3300		SILTSTN. GRAY TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ LENTIC FRAGS. TA MICA. GLAUC.													
3350		CHROMATOGRAPH=100% C1													
3400		SAND. FIRM. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ MIN. BRN. GRAVELS. TAN CLAY.													
3450		SAND. FIRM. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ MIN. BRN. GRAVELS. TAN CLAY.													
3500		CG=15U SAND. FIRM. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ MIN. BRN. GRAVELS. TAN CLAY.													
3550		SAND. FIRM. TO BK GRN. GRAY. SOFT. TO FIRM. FRI. W/ MIN. BRN. GRAVELS. TAN CLAY.													
3600		CHROMATOGRAPH=100% C1													
3650		LI. BLU. GRAY. SOFT. TO HD. WELDED SAND AS ABOVE. SILTSTN. MIN.													
3700		SILTSTN. V. HD. GRAY BRN. FIRM. FRI. W/ BK GRAY. HD. WELDED TUFF. CG AS ABOVE.													
3709		DRILLER'S TOTAL DEPTH 3709'													